

CLEAN COPY OF THE CLAIMS

1. **(Currently Amended)** A peptide consisting of 18 amino acids, the peptide having the primary structure: 8 AA – Cysteine – 2 AA – Citrulline – 1 AA – Cysteine – 4 AA (SEQ ID NO:4); wherein the peptide contains a peptide turn comprising at least one citrulline residue, and wherein said peptide is specifically recognised by rheumatoid arthritis autoimmune antibodies from patients suffering from rheumatoid arthritis; and wherein the peptide is a cyclic peptide.
2. **(Cancelled)**
3. **(Previously Presented)** A peptide according to claim 1 characterised in that said peptide is biotinylated.
4. **(Previously Presented)** A peptide according to claim 1 characterised in that said peptide is a synthetic peptide.
- 5.–7. **(Cancelled)**
8. **(Currently Amended)** A peptide according to claim 1 characterised in that the amino acid flanking the citrulline residue on the amino-terminal side of the citrulline residue is glycine or serine, and/or the amino acid flanking the citrulline residue on the carboxy-terminal side of the citrulline residue is glycine.
9. **(Previously Presented)** A peptide according to claim 1 comprising the amino acid sequence:
QDTIHGHPCSXXGCRPGY (SEQ ID NO: 12) or
QDTIVGWGCD SXGCRPGQ (SEQ ID NO: 17).
- 10.–11. **(Cancelled)**
12. **(Currently Amended)** A kit for use in detecting autoantibodies present in the sera of patients with rheumatoid arthritis, said kit comprising at least one peptide according to claim 1, with said peptide optionally bound to a solid support.

13. **(Currently Amended)** A kit according to claim 12, said kit comprising a range of peptides according to claim 1, wherein said peptides are attached to specific locations on a solid support.

14. **(Previously Presented)** A diagnostic kit according to claim 13, wherein said solid support is a membrane strip.

15.-22. (Cancelled)

23. **(Previously Presented)** A method for detecting antibodies present in sera from patients with rheumatoid arthritis, comprising:

- a) contacting a biological sample to be analyzed for the presence of said antibodies with a peptide of claim 1, and
- b) detecting the immunological complex formed between said antibodies and said peptide.

24.-27 (Cancelled)

28. **(Currently Amended)** The method of claim 23 wherein the peptide consists of the amino acid sequence QDTIHGHPCSXXGCRPGY (SEQ ID NO: 12).

29. **(Currently Amended)** The method of claim 23 wherein the peptide consists of the amino acid sequence QDTIVGWGCDSXGCRPGQ (SEQ ID NO: 17).